Appl. No. 10/735,482 Amdt. dated July 10, 2007 Reply to Office Action of April 10, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) In an object-oriented environment, a method of testing a software program comprising a plurality of components, the method comprising:

determining a cursor position;

ascertaining ascertaining, based on the cursor position, an accessibility context associated with the cursor position;

identifying a component by reference to the accessibility context context, wherein the accessibility context has an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context, wherein the identified component comprises the set of properties;

searching a component hierarchy for an object having an accessibility context matching the component's accessibility context; and

replaying an event by calling a program method defined by an accessibility role for the object.

- 2. (Canceled)
- 3. (Canceled)
- 4. (Currently Amended) A method as recited in claim 2, 1, wherein the object comprises the set of properties, including the at least one program method, defined by the accessibility role.
- 5. (Original) A method as recited in claim 1, wherein the cursor position is determined in response to a trigger.

- 6. (Original) A method as recited in claim 5, wherein the trigger comprises the execution of the program method a first time.
- 7. (Original) A method as recited in claim 6, wherein replaying an event comprises executing the program method a second time.
- 8. (Original) A method as recited in claim 5, wherein the trigger comprises a cursor entering a field.
- 9. (Original) A method as recited in claim 5, wherein the trigger comprises a cursor exiting a field.
- 10. (Original) A method as recited in claim 5, wherein the trigger comprises a user manipulating a mouse button.
- 11. (Original) A method as recited in claim 5, wherein the trigger comprises a user manipulating a hotkey on a keyboard.
- 12. (Original) A method as recited in claim 11, wherein the user manipulating a hotkey simulates execution of the program method, and wherein replaying an event comprises executing the program method a first time.
- 13. (Original) A method as recited in claim 1, further comprising creating a record of the identified component.
- 14. (Original) A method as recited in claim 13, further comprising manually modifying the record of the component.
- 15. (Original) A method as recited in claim 14, wherein manually modifying the record of the component comprises changing a property of the component.

- 16. (Original) A method as recited in claim 14, wherein manually modifying the record of the component comprises changing an accessibility role of the component.
- 17. (Original) A method as recited in claim 14, wherein manually modifying the record of the component comprises identifying a different program method to be executed in replaying an event.
- 18. (Original) A method as recited in claim 13, wherein the record is incorporated in a file.
- 19. (Original) A method as recited in claim 18, wherein the file is an XML file.
- 20. (Original) A method as recited in claim 1, wherein the component comprises a button.
- 21. (Original) A method as recited in claim 20, wherein the program method performs an action related to the selection of the button.
- 22. (Original) A method as recited in claim 1, wherein the component comprises a window.
- 23. (Original) A method as recited in claim 22, wherein the program method performs an action selected from the group consisting of opening the window, closing the window, resizing the window, and moving the window.
- 24. (Original) A method as recited in claim 1, wherein the component comprises a selectable component.
- 25. (Original) A method as recited in claim 24, wherein the program method performs an action selected from the group consisting of selecting the component and deselecting the component.

- 26. (Original) A method as recited in claim 1, wherein the component comprises a portion of text.
- 27. (Original) A method as recited in claim 26, wherein the program method performs an action selected from the group consisting of cutting the portion of text, copying the portion of text, pasting the portion of text and formatting the portion of text.
- 28. (Original) A method as recited in claim 1, further comprising, performing, for a plurality of iterations, the steps of determining a cursor position relative to a component, ascertaining an accessibility context, and identifying the component.
- 29. (Original) A method as recited in claim 28, further comprising creating a plurality of records, each of the plurality of records comprising a component identified in one of the plurality of iterations.
- 30. (Original) A method as recited in claim 29, further comprising, with respect to each of the plurality of records, searching a component hierarchy for an object having an accessibility context matching the identified component's accessibility context and replaying an event by calling a program method defined by an accessibility role for the object.
- 31. (Original) A method as recited in claim 1, wherein replaying the event comprises displaying a result of the event on a display device.
- 32. (Original) A method as recited in claim 1, wherein replaying the event comprises writing a result of the event to a file.
- 33. (Original) A method as recited in claim 1, further comprising, after replaying the event, evaluating a result of the event.
- 34. (Original) A method as recited in claim 33, wherein evaluating a result of the event comprises comparing the result of the event with an anticipated result of the event.

- 35. (Currently Amended) A method as recited in claim 1, further comprising analyzing the event to determine whether the component complies with <u>legal requirements for accommodating persons with disabilities.</u> the Americans with Disabilities Act.
- 36. (Currently Amended) In an object-oriented environment, a method of testing a software program comprising a plurality of components, each component comprising an accessibility context capable of identifying the component within the software program, the method comprising:

determining a cursor position;

ascertaining ascertaining, based on the cursor position, an accessibility context associated with the cursor position, the accessibility context having an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context;

identifying a component by reference to the accessibility context, the component comprising the set of properties, including the at least one program method, defined by the accessibility role;

searching a component hierarchy for an object having an accessibility context matching the component's accessibility context, such that the object comprises the set of properties, including the at least one program method, defined by the accessibility role; and

replaying an event by calling the program method defined by the accessibility role for the object.

- 37. (Original) A method as recited in claim 36, further comprising creating a record of the identified component, the record including the component's accessibility role.
- 38. (Currently Amended) A computer program product for testing a software program comprising a plurality of components, the computer program product being embodied in a computer readable medium and comprising instructions executable by a computer to:

determine a cursor position;

Appl. No. 10/735,482 Amdt. dated July 10, 2007 Reply to Office Action of April 10, 2007

ascertain ascertain, based on the cursor position, an accessibility context associated with the cursor position;

identify a component by reference to the accessibility context, wherein the accessibility context has an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context, wherein the identified component comprises the set of properties;

search a component hierarchy for an object having an accessibility context matching the component's accessibility context; and

replay an event by calling-a the program method defined by-a the accessibility role for the object.

39. (Currently Amended) A system for testing a software program comprising a plurality of components, the system comprising:

a processor;

an input device in communication with the processor; and

a computer readable medium in communication with the processor, the computer readable medium comprising instructions executable by the processor to:

determine a cursor position;

ascertain ascertain, based on the cursor position, an accessibility context associated with the cursor position;

identify a component by reference to the accessibility context, wherein the accessibility context has an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context, wherein the identified component comprises the set of properties;

search a component hierarchy for an object having an accessibility context matching the component's accessibility context; and

replay an event by calling-a the program method defined by-an the accessibility role for the object.

- 40. (Original) A system as recited in claim 39, wherein the cursor position is determined in response to a trigger.
- 41. (Original) A system as recited in claim 40, wherein the input device is a mouse having at least one button, and wherein the trigger comprises manipulation of the button.
- 42. (Original) A system as recited in claim 40, wherein the input device is a keyboard having at least one hotkey, and wherein the trigger comprises manipulation of the hotkey.
- 43. (Original) A system as recited in claim 39, further comprising a display device in communication with the processor, wherein replaying the event comprises displaying the result of the event on the display device.
- readable medium encoded with a data structure that can be used to test a software program comprising a plurality of components, each component comprising an accessibility context capable of identifying that component within the software program; the data structure comprising at least one record of a component, the at least one record comprising an accessibility role associated with an accessibility context for the component; the accessibility role defining a set of properties, including at least one program method, associated with the component, such that the record can be compared with an object in a component hierarchy to determine whether the object has an accessibility context matching the component's accessibility context, and, if the object's accessibility context matches the component's accessibility context, an event can be replayed by calling a program method associated with an accessibility role for the object.
- 45. (Currently Amended) A system for testing a software program comprising a plurality of components, the system comprising:

means for determining a cursor position;

means for <u>ascertaining ascertaining</u>, <u>based on the cursor position</u>, an accessibility context associated with the cursor position;

means for identifying a component by reference to the accessibility context, wherein the accessibility context has an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context, wherein the identified component comprises the set of properties;

means for searching a component hierarchy for an object having an accessibility context matching the component's accessibility context; and

means for replaying an event by calling-a the program method defined by-an the accessibility role for the object.

46. (Currently Amended) In an object-oriented environment, a method of determining a software program's compliance with the Americans with Disabilities Act, legal requirements for accommodating persons with disabilities, the software program comprising a plurality of components, the method comprising:

determining a cursor position;

ascertaining ascertaining, based on the cursor position, an accessibility context associated with the cursor position;

identifying a component by reference to the accessibility context, wherein the accessibility context has an accessibility role that defines a set of properties, including at least one program method, associated with the accessibility context, wherein the identified component comprises the set of properties;

searching a component hierarchy for an object having an accessibility context matching the component's accessibility context; and

analyzing the object to evaluate the component's compliance with the Americans with Disabilities Act legal requirements for accommodating persons with disabilities; and reporting, to a user, a result of an analysis of the object.

- 47. (Original) A method as recited in claim 46, wherein analyzing the object comprises replaying an event by calling a program method defined by an accessibility role for the object.
- 48. (Original) A method as recited in claim 46, wherein analyzing the object comprises analyzing a set of properties of the object.
- 49. (Original) A method as recited in claim 46, wherein analyzing the object comprises evaluating the object's accessibility context to determine whether the component properly implements accessibility features.
- 50. (Original) A method as recited in claim 46, wherein analyzing the object comprises evaluating the object's accessibility role to determine whether the component properly implements accessibility features.